## **Managing Wisconsin's Infoglut**

A report on the importance of managing "the third resource" by the Wisconsin Information Resource Council (WIRC)



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This report was created by a workgroup of the Wisconsin Information Resource Council.

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## **Managing Wisconsin's Infoglut**

Information is today's business currency. It is recognized as a key strategic resource, the basis for doing business and delivery of services, and a sustaining force of economic prosperity.

#### Introduction

Information is a valuable asset for any enterprise. Like money and personnel it warrants management to avoid waste and obtain maximum benefit. As the State does more of its business over the Internet, how well – or how poorly – this information resource is managed will be increasingly exposed. Wisconsin's business partners and citizens expect to conduct cohesive, integrated, efficient and secure e-business transactions and information exchanges with State agencies. Well-managed data is essential to delivering on this expectation.

The Internet has provided a revolutionary change in lowering the cost of obtaining easy access to information, with enormous consequences for how business firms and government actually function. Real upheavals in business and governmental operations are taking place, which will produce better performance at lowered costs. These changes include:

- radically shortened time to complete tasks,
- information-enhanced decision-making especially by lower-level workers at the point-of-action,
- increased opportunities for responsible business process outsourcing, and
- the ability to really manage the wealth of valuable knowledge agencies and businesses possess.

Most governmental organizations today are intensely concerned about "e-government", especially from the viewpoint of economic development. Improved access for enterprises and citizens to the information of government is critical. To provide the needed platform of resources for the new economy based upon information, sound attention is needed now to set the stage for good practices in information management.

Automated information is not only growing in relative importance but its volume also continues to expand exponentially. E-business will only accelerate this trend. Electronic technology provides powerful methods of collecting and processing vast quantities of information. However, it also adds complexity to the process of using information and making it available to others in a manner consistent with State business needs, legal requirements and the public interest. There is now a term for an enterprise's massive digitized information sources: "infoglut." According to the IT consulting service The Gartner Group:

"Management of infoglut is a growing concern for enterprises; during the next five years, the most conservative estimates of growth in digitized data will outrun the most aggressive advances in technology to manage it."

In many ways, government has no other product besides the capture, enhancement, and improvement of information. Just as States were responsible for the construction of roads and bridges to provide for the free flow of commerce in support of economic well-being, so too the State is responsible for the information infrastructure, in this case the data stores, on which trade and prosperity depend. The two legs of the digital economy are the Internet and the databases and data warehouses behind the scene. This document addresses the latter.

## The next wave: managing the "information" in IT

In February 1995 Governor Thompson signed Executive Order # 242, a Statement of Direction relating to the Management of Information Technology (IT) in the State of Wisconsin. This executive order has had a profound impact on developing a standard technical infrastructure within state government. It enables the State as an enterprise to better communicate, improve information flow, and reduce IT related costs.

The next wave of standardization required is an enterprise approach to managing information resources. Ongoing business and information technology strategic planning efforts must include components to coordinate information management strategies, goals, actions and resources. The time is right to integrate data and technology using Information Resource Management. The Wisconsin Information Resources Council (WIRC) developed this report as a road map for senior, program and IT management to pursue these efforts and move the State of Wisconsin toward an Information and Data Architecture that will benefit internal government operations and the constituents we serve.

The call to manage the information resource is not new. Often missing from the debate, however, was an analysis of cost. In this report, WIRC attempts to answer key questions about the cost and value of information and its management.

- ♦ What are the costs involved in capturing and storing electronic information used by Wisconsin State government?
- How much money has the State of Wisconsin invested in managing the information resource?
- What percentage of the total costs is allocated to the management function?
- ♦ How does that percentage compare to the State's investment in managing its fiscal and personnel resources?

This report addresses the cost to capture and store information. It excludes the extensive expense of using it, including developing computer applications, processing data, locating data and retrieving it. Without this exclusion, the study could have included nearly all the costs of State IT. WIRC calculated how much money the State invests to manage the information resource and expressed this as a percent of the total costs. We calculated similar percentages for the fiscal and personnel resources. The State percentage investment in managing its fiscal and personnel resources was found to be many times greater than for managing the information resource.

# The costs of capturing information for Wisconsin State government exceed \$1.2 billion annually

As the basis of an initiative to better manage and reduce the overall burden of capturing information, the State of Ohio calculated the annual costs to its citizens (private businesses, political subdivisions and the public) of filling out forms.<sup>2</sup> By adjusting the Ohio numbers for Wisconsin's population, we estimate the annual Wisconsin cost for citizen completion of forms at about \$500 million.

Further, the Department of Health and Family Services reports that 71% of its forms are used internally.<sup>3</sup> We applied this factor to the estimated annual costs to the public, adjusted for lower volumes and somewhat less burdensome forms, and projected the annual internal cost to Wisconsin State agencies for capturing information through forms to be about \$700 million. Together, the costs for State agencies and the public to capture information used by State government are over \$1.2 billion a year.

## State agencies' costs of storing information exceed \$25 million annually

Wisconsin State agencies spend \$20 million annually to purchase and manage the disk drives on which electronic information is stored. They spend another \$5 million on office space dedicated to paper records and for the State Records Center budget. The cost in staff time to manage paper records is not included in this conservative estimate.

## The impact of information on the quality of decisions

Information is the basis for decision making. Good decisions tend to be based in part on the potential for organizations to realize cost savings or cost avoidance. Conversely, poor decisions tend to increase costs.

Sound decisions depend on the ready availability of timely, complete and accurate information. For example, quality information plays a key role in the management of the State's largest program, Medicaid. This program uses an integrated data warehouse to closely monitor access to medical services by recipients and to identify opportunities to reduce service costs. Historical profiles of millions of patients and providers are analyzed to identify clients who tend to over-utilize services. These clients may be "locked-in" to a single primary care physician and pharmacy. Since its inception, the program has saved \$438,000 a year and is returning over six dollars for every dollar invested.<sup>4</sup>

This same "well-managed" database allows the Department of Justice to obtain fraud settlements and restitution orders for the Medicaid program of nearly \$350,000 a year. Using the analytic capabilities of this same data warehouse to improve management of Medicaid expenditures and delivery of medical services and by reducing fraud and waste, the Department of Health and Family Services recovers a projected \$10 to \$20 million each year. These break-through applications of program management preserve the privacy and confidentiality of the sensitive medical and personal data being managed. Advanced information technology makes possible both respect for individuals and conformance to fair rules and regulations. However, the benefits require skillful implementations and management of state of the art information capabilities.

Another example illustrates the impact of losing information needed for making critical decisions. The Sentencing Commission developed and maintained a database to track information on felony inmates, their offenses and sentences. The Commission maintained a second database on compliance with sentencing guidelines and statewide sentencing patterns. In spite of extensive efforts by state staff and international experts, these invaluable databases became unreadable over time. Because of insufficient investments in managing information and achiving data, Wisconsin judges and policy makers have forever lost key baseline data on which to make future decisions on sentencing inmates in Wisconsin.<sup>7</sup> This example gives new meaning to the phrase "irreparable harm," which should not be taken out of context, and here implies both economic costs and a less secure society. Thomas Jefferson stated that the main two functions of government are to defend against foreign enemies and provide for domestic tranquility. Here the security of our streets and communities is at risk due to the failure of data quality.

Equipment and technology also must be managed to protect the value of information. In 1976, the National Archives identified certain data from the 1960 Census files as having long-term historical value. However, a large portion of the selected records resided on tapes that, while identified as "permanent" by the Census Bureau, could only be read with a tape drive that was long obsolete. "The

United States is in danger of losing its memory," proclaimed the Committee on the Records of Government; "When the computer tapes containing the raw data from the 1960 federal census came to the attention of NARS (the National Archives and Records Service), there were only two machines in the world capable of reading those tapes: one in Japan and the other already deposited in the Smithsonian as a relic."

Inaccurate or misused data, once printed, has a powerful effect. Despite the error, it continues to be perceived as true and is difficult to impossible to correct. When John Naisbitt's colleagues were researching the information that eventually became the international bestseller <u>Megatrends</u> in 1982, inaccurate data concerning the dropout rate in Wisconsin's schools was provided. This misinformation found its way into the final version of the book, reading: "In Wisconsin, the dropout rate increased 50 percent during the 1970s." Although the information was erroneous, when the <u>Milwaukee Journal</u> contacted then Governor Lee Dreyfus, he registered his "shock" at the dropout data, saying, "These people make up a city approximately the size of Madison and they will have to be supported by the rest of the state."

The risks of not having accurate data in the public sector vary from undercounting in the census, with resulting under-representation in the legislature, to over-payment of invoices and fiscal stress to the economic system. In the case of some public functions such as air traffic control, the operation of power plants or worker safety in manufacturing, the risks and consequences of defective data are obvious (and chilling). There is no room for error. None. In other instances, such as public education, the consequences may be more long term --- if people don't learn to read or perform basic math --- but equally dire. Our competitive advantage is at risk. Educators might usefully think about how the movement to privatize education might both challenge and be an incentive to improved data quality by requiring new rigor in reporting results in a competitive environment.

## Redundancy must be controlled

A major cause of Infoglut is information redundancy. The public is inundated with forms and burdensome reporting requirements, many containing repetitive data. Information managers are challenged to control redundancy of information capture and storage, but it is difficult to determine how much redundancy is contained in the information that government agencies capture. However, one method is to study how much redundancy some organizations have been able to remove. The Wisconsin Department of Public Instruction, over ten years, was able to reduce its total number of forms **from just over 3000 to just under 1000**. As another example, the State of Ohio reported a 40% reduction, over five years, in the amount of time the public spends filling out agency forms. If applied to Wisconsin, this would translate into an estimated **\$200 million annual savings to the public**.

As a component of developing this report, the Department of Health and Family Services studied the total cost to the public to complete all nursing home forms required by all state agencies.

- ♦ Eighty-nine different forms from four agencies are completed a total of 1.1 million times annually.
- ♦ The total cost to the public is \$1.1 million a year.
- Seven percent of the information submitted was judged to be redundant.

While much of the redundant information is unavoidable identifying information, the study determined that even if half of the redundant data, or 3.5%, is unnecessarily redundant, that would equal an avoidable annual cost to the public of nearly \$40,000. More significantly, if this 3.5% factor is applied to the total estimated Wisconsin data capture burden, the potential savings could exceed \$42 million a year.

## **Relative Costs of Asset Management**

Private and public enterprises are accustomed to appreciable expenditures to manage fiscal and human resources. These assets and associated costs are well recognized. However, organizations less commonly make similar investment in managing the increasingly important and expensive information resource.

- For Wisconsin state agencies, excluding the University System, annual expenditures to manage money, fiscal resources, equal **about 5%** of the managed resource (the State Operations budget).
- ♦ Similarly, the annual cost of managing the human resource (measured by total salary and fringe costs) is **over 6%.**
- ♦ In contrast, Wisconsin State government's investment in managing the increasingly important and expensive information asset is only **0.5%** a year.

#### **Relative Costs of Managing Three Assets as a Percentage of Those Assets**

Resource Type	Resource Managed	Annual Resource Cost	Resource Components		Asset Management Percent
Money	State Operations budget	\$4.5 billion	<ul> <li>◆ DOR, Dept Treasury &amp;         Investment Board budgets     </li> <li>◆ Agency fiscal staff salary &amp;         fringe     </li> </ul>	\$227 million	5%
Personnel	State agency salary & fringe	1.9 billion	<ul> <li>◆ DER, ETF &amp; Personnel         Commission budgets</li> <li>◆ Agency HR staff</li> <li>◆ Cost of supervision</li> </ul>	\$117 million	6%
Information	Captured and stored data	\$1.225 billion	<ul> <li>Records Center budget</li> <li>Agency IRM staff salary &amp; fringe</li> </ul>	\$6+ million	0.5%

## **Information Resource Management**

What does Wisconsin need to do to manage information resources more effectively and efficiently? State government should more vigorously apply a discipline known as *Information Resource Management*, or IRM. This is the practice of managing information as a valuable and sharable enterprise resource. IRM is a business environment in which information resources (data, applications, technology) are managed like other critical business resources, with care given to its protection in terms of access, privacy and security. It combines the best practices of forms and records management, library and archival management, data administration, database administration, and data security. Related evolving disciplines may eventually include "knowledge management" and web-content management, aimed at bringing order to the "infoglut" of the Internet and e-business.

Information management will put information in the service of the public rather than the bureaucracy. It will increase information's potency as a weapon in the battle for economic prosperity and the provisioning of good jobs in the global digital economy. To ensure that the greatest value is obtained from the enterprise's information resource, IRM endows its automated data with the following characteristics.

The information collected is *needed*. The analysis process asks:

- ♦ do we collect data we don't use
- do we know the purpose it will serve
- what law, rule or policy requires the data
- has the data already been collected
- are data collection efforts managed together?

#### The information resource is *understood*. We know:

- ♦ what information is available
- ♦ what it means
- how it is represented
- ♦ where is it located
- ♦ how is it used.

#### The information resource is *accessible*:

- the information is categorized, indexed, and organized for easy retrieval
- information about the information (needed to access it) exists and is itself accessible
- tools to access information and the knowledge of how to use them are readily available
- the value of information increases with use.

#### The information resource is *protected*. It is secure from:

- unauthorized access
- unintentional or ill-intended destruction
- ♦ tampering.

#### The information resource is *sharable* (where applicable):

- enable access linking and sharing of quality data
- share or protect when appropriate
- the value of information increases when combined with other information.

#### The information resource is *efficiently* created and used:

- any redundancy is intentional and managed
- data capture instruments (forms, records, screens, web pages) are well designed
- more information is not necessarily better
- ♦ information is self-generating
- data storage technologies are modern and well used.

#### The information resource is *responsibly used*. All information is:

- accessed only by those with a legitimate need
- ♦ kept up-to-date
- retained for an appropriate time period and then properly disposed
- managed to protect confidentiality and privacy of personal information
- the responsibility of a designated custodian
- a value one can and must measure.

The information resource is of *high quality*:

- subjects are accurately identified
- ♦ there are no errors
- redundant data are not in conflict
- the value of information increases with accuracy.

The information resource's *longevity is managed:* 

- retained accurately for its useful life
- disposed according to a plan.

#### **Recommendations**

This report argues that information constitutes a third critical resource alongside finances and personnel for any enterprise in the age of e-business. While the importance and size of the information resource is increasing exponentially, to the point of "infoglut", Wisconsin State government's investment in its management is not keeping pace. The following are specific recommendations for improving the management of Wisconsin government's information resource. WIRC welcomes any invitations to assist in evolving these concepts to implementation.

- ♦ Issue an Executive Order. The Governor should consider issuing an executive order on information resource management, as a follow-up to Executive Order 242 which established enterprise management of information technology. The Order would integrate data and technology using enterprise management strategies. It would set the expectation that information is to be managed similarly to finances and personnel and could require or encourage the actions of the remaining recommendations.
- ♦ *Invest Resources*. In the coming biennium, increase the percent of the investment in managing the information resource from under ½% to at least 1%. Similar increases should follow in future biennia. This could take the form of a standard in the Executive Order and/or be implemented in the Governor's Budget.
- ♦ Support Data Stewardship. Establish data stewardship programs in state agencies and possibly enterprise-wide. Data stewards are business/program-side people with knowledge of specific information sets who are responsible for making decisions about managing the resource for the best use of all.
- ◆ Establish Agency Information Resource Managers. Establish professional information resource management positions in the agencies. These should be professional level positions combining forms and records management, data administration and data security. As agencies evolve web content management, document management, and knowledge management positions these would fit as well. In many organizations this would consolidate similar but currently fragmented positions into more effective, full time responsibilities. DER should consider establishing a classification specification for this professional-level position type. Provide appropriate curriculum and training to assure comprehensive and up-to-date skills.
- ♦ *Increase Enterprise-wide Resources*. Increase the state enterprise capacity to coordinate and facilitate information resource management beyond the current one FTE.

- ♦ *Provide Training.* Make training and educational materials emphasizing the value of the State's data assets widely available at all levels of government. Training on the responsibilities and best practices of both business/program and IT staff in effective life cycle management of information should be part of the DOA-sponsored core IT curriculum.
- ♦ Implement Core Data Standards. Reduce redundant data capture and facilitate information sharing by incorporating standard data definitions, formats and content. Because it can be difficult and expensive to successfully implement data standards, WIRC recommends incremental, highly sponsored and sharply focused efforts to develop and apply data standards. We recommend an initial focus on core data, such as that which establishes the identification of the subjects of information capture. The current statewide WI-MAP project seems to be going in this direction with the information needed to identify users of State government Internet applications. Another logical core data area is address and related geographic information necessary to obtain the interoperability envisioned by the Land Information Board.
- ♦ Develop Data Documentation. Maintaining an accurate inventory is a fundamental requirement in managing the State's information resource. Today, however, most of our information resource, regardless of its value or cost, is inadequately documented. Finding robust tools (e.g. software) to serve as effective repositories of this "information about information" is a continuing challenge across the nation and within the information technology industry. Both DOA and the agencies should give increased attention to this key challenge.
- ♦ *Manage the Whole Life Cycle of Data.* Manage information through its whole life cycle. The life cycle begins with creation of information and ends with planned destruction. Life cycle management pertains to Information Resources Management and includes records, data and forms on all media.

<sup>&</sup>lt;sup>1</sup> "The Enterprise Portal: Is It Knowledge Management?", August 02 1999 Research Note, The Gartner Group

<sup>&</sup>lt;sup>2</sup> Ohio Department of Administrative Services "Forms Burden Reduction Act: Progress Report Fiscal Years 1995-1999"

<sup>&</sup>lt;sup>3</sup> DHFS (formerly DHSS) FY93 report to the Public Records and Forms Board

<sup>&</sup>lt;sup>4</sup> Reported by Wayne Thompson of the Department of Health and Family Services

<sup>&</sup>lt;sup>5</sup> Reported by Juan Colas of the Department of Justice

<sup>&</sup>lt;sup>6</sup>Reported by Wayne Thompson of the Department of Health and Family Services,

<sup>&</sup>lt;sup>7</sup> Sentencing Commission Databases Report, Electronic Records Program, State Archives, and State Historical Society of Wisconsin, May 1996

<sup>&</sup>lt;sup>8</sup> Adams, Margaret O. and Thomas E. Brown (1996) Historical Narrative on Data From the 1960 Census. Unpublished report. Washington, D.C.: Center for Electronic Records, National Archives and Records Administration.

<sup>&</sup>lt;sup>9</sup> Naisbitt, John (1982) <u>Megatrends: Ten New Directions Transforming Our Lives</u>. Statistics on the dropout rate in Wisconsin appear on page 32.

<sup>&</sup>lt;sup>10</sup> Department of Public Instruction "Data Collection/Duplication Study"

<sup>&</sup>lt;sup>11</sup> Ohio Department of Administrative Services "Forms Burden Reduction Act: Progress Report Fiscal Years 1995-1999"

#### Attachment 1: Ohio Fy95-99 Report

#### 1995 Beginning Numbers

1995 Agencies	Beginning Number of Forms	Beginning Hours of Burden	Mean Hours of Burden	Calculated Hours of Burden	
All agencies except Human Services & Employment Services	3,078	73,215,386	23,787	NA	
Employment Services	204	22.417.070	109.888		4,852,482
Human Services	629	, ,	,		14,961,819
Total	029	20,734,141	45,714		93,029,686

The Employment Services and Human Services Departments did not use the standard methodology. Their numbers were therefor left out of the revised 1999 report. We have included numbers for these agencies which is their number of forms times the average burden hours per form for all other agencies. These included Numbers are much more conservative than the numbers reported by the two agencies themselves.

The FY1995 numbers are used as these are the counts before Ohio initiated a statutorily mandated, targeted Program of forms reduction. Since Wisconsin has no comparable program, the 1995 numbers are believed to be most comparable.

Reduction in reporting burden in Ohio from FY95 to FY99 is 40%. This translates into 40% an inferred annual savings in public reporting burden for Wisconsin in FY99 of \$200 million. \$200,627,878 (40% X %501 million = \$200 million)

## Attachment 2: Data Capture Costs

## The Public

Ohio FY95 forms burden in hours	93,029,686
Ohio population 7/98	11,210,000
Wis population 7/98	5,224,000
Wis/Ohio population ratio	47%
Inferred Wis forms burden in hours	43,352,996
1997 Wis per capita income annual (DOR website)	\$24,048
Wis per capita hourly income	\$11.56
Burden cost	\$501,227,327

## **State Agencies**

FY93 DHFS ratio of internal to external forms is	243%
Estimated state internal forms burden based on DHFS ratio	\$ 1,219,925,824
CY00 DHFS Forms Center: average usage/form	
internal/external =	77%
Internal burden adjusted by .77 usage factor =	\$ 941,290,082
DHFS forms manager estimates average external form	
is 3/4 as burdensome to complete as internal form	
Internal burden adjusted by 3/4 burdensomeness factor =	\$705,967,562

## Redundancy

•	
Potential external burden savings based on 3.5% factor from the	
DHFS Nursing Home Study =	\$42,251,821

#### Attachment 3: Data Storage Costs

## Annual Cost of DASD for State Agency PCs/LANs

			Current		
	DASD		Purchase		
Item	Size	Count	Price	Cost	Notes
Desktop PCs	10 GB	25,000	\$300	\$7,500,000	
LAN Servers	70 GB	1,300	\$2,100	\$2,730,000	
Lap tops	10 GB	5,500	\$300	\$1,650,000	
Large DASD "farms"					
MEDS	2000 GB	1	\$600,000	\$600,000	
DOT	40 GB	1	\$12,000	\$12,000	
Total				\$12,492,000	
Annual purchase price		\$4,164,000			
TCO (purchase price X3, covers technical staff only)			\$12,492,000	Α	

## Total Annual State Agency Data storage costs PC/LAN and Paper

Item	Cos	st	
DASD	\$	12,492,000	·
InfoTech chargeback for DASD	\$	7,643,923	В
Total DASD costs	\$	20,135,923	
Individual workstations paper	\$	3,580,000	
25,000 knowledge workers X 8 sq ft = 200,000 sc	q ft		
\$17.90 per sq ft prime office space			
200,000 X \$17.90 = \$3,580,000			
Centralized Files paper	\$	358,000	
8 sq ft for every 10 knowledge workers			
$2,500 \times 8 \text{ sq ft} = 20,000$			
20,000 XX \$17.90 = \$358,000			
Records Center budget	\$	962,350	С
Total paper storage costs	\$	4,900,350	
Grand Total		25,036,273	

Note A Citation for TCO factor:

Gartner Group Strategic Analysis Report

09-Feb-96

Total Cost of Ownership: Reducing PC/LAN Costs in the Enterprise

D. Cappuccio, W. Kirwin, L. Pawlick, S. Namasivayam

Note B Ann Borque email 4-4-00

Note C Steve Hirsch email

# **Attachment 4: Resource Management Costs** SFY00

Fiscal Resource	
Asset Management Costs	
DOR Budget	\$155,401,300
Treasury Budget	\$1,612,800
Investment Board Budget	\$14,498,600
Salaries of agency fiscal staff	\$44,558,303
Fringe @ 0.3	\$13,367,491
DOR fiscal staff salaries	-\$1,265,740
DOR fiscal staff fringe	-\$379,722
Treasury fiscal staff salaries	-\$390,040
Treasury fiscal staff fringe	-\$117,012
Inv Brd fiscal staff salaries	none
Inv Brd fiscal staff fringe	none
Total	\$227,285,980
Asset Costs	
Total state budget	\$7,153,416,900
UW budget state ops	-\$2,651,845,900
Net state budget state ops	\$4,501,571,000
Fiscal RATIO	5.05%

Information Resource	
Asset Management Cost	
Records Center	\$962,350
IRM Salaries	\$4,366,634
IRM Fringes	\$1,309,990
Records Center IRM salaries	-\$159,796
Records Center IRM fringe	-\$47,939
Total	\$6,431,239
Asset Costs	
Public data capture cost	\$501,227,327
State agency data capture cost	\$705,967,562
Data capture total	\$1,207,194,889
Data storage cost	\$25,036,273
Total	\$1,232,231,162
IRM Ratio	0.52%

Human Resource (Personnel)	
Asset Management Costs	
DER budget	\$6,441,500
ETF budget	\$16,995,000
Personnel Commission budget	\$858,500
Salaries of agency HR staff	\$15,699,451
Fringes of agency HR staff	\$4,709,835
DER HR salaries	-\$1,393,174
DER HR fringe	-\$417,952
ETF HR salaries	-\$740,626
ETF HR fringe	-\$222,188
Personnel Commission HR	none
salaries Personnel Commission HR fringe	none
Supervisor cost @	\$75,119,580
Total	\$117,049,926
lotai	Ψ117,043,320
Asset Costs	
State payroll salaries	\$2,671,166,300
State payroll fringes	\$914,235,700
UW payroll salaries	-\$1,310,822,600
UW payroll fringes	-\$396,589,900
NetState payroll salaries	\$1,360,343,700
NetState payroll fringes	\$517,645,800
NetTotal state payroll	\$1,877,989,500
HR Ratio	6.23%

IRM salaries and fringes include data administration, database administration, forms and records management, and information security positions.